

WHAT IS CLAIMED IS:

1. An isolated nucleic acid molecule consisting essentially of a nucleotide sequence selected from:

(a) the nucleotide sequence as set forth in residues 73 to 601 in SEQ ID NO:1;

(b) a nucleotide sequence encoding the polypeptide as set forth in residues 25 to 194 in SEQ ID NO:2;

(c) the nucleotide sequence as set forth in residues 73 to 451 in SEQ ID NO:1;

(d) a nucleotide sequence encoding the polypeptide as set forth in residues 25 to 144 in SEQ ID NO:2;

(e) the nucleotide sequence as set forth in residues 485 to 820 in SEQ ID NO:1;

(f) a nucleotide sequence encoding the polypeptide as set forth in residues 25 to 113 in SEQ ID NO:2;

(g) a nucleotide sequence encoding the polypeptide as set forth in residues 73 to 113 in SEQ ID NO:2;

(h) a nucleotide sequence encoding the polypeptide as set forth in residues 156 to 267 in SEQ ID NO:2;

(i) a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of at least one of (a) to (f), wherein the encoded polypeptide has an activity of the polypeptide as set forth in SEQ ID NO:2; and

(j) a nucleotide sequence complementary to at least one of (a)-(h).

2. An isolated nucleic acid molecule consisting essentially of a nucleotide sequence selected from:

(a) a nucleotide sequence consisting essentially of a nucleotide sequence that is at least about 70, 75, 80, 85, 90, 95, 96, 97, 98, or 99 percent identical to the nucleotide sequence according to claim 1, wherein the nucleotide sequence encodes a polypeptide that has an activity of the polypeptide as set forth in SEQ ID NO:2;

(b) a nucleotide sequence encoding an allelic variant or splice variant of the nucleotide sequence according to claim 1, wherein the encoded polypeptide has an activity of the polypeptide as set forth in SEQ ID NO:2;

(c) a nucleotide sequence selected from at least one of (a) and (b) encoding a polypeptide of at least about 25 amino acid residues, wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO:2;

(d) a nucleotide sequence selected from at least one of (a), (b), and (c) comprising a fragment of at least about 16 nucleotides; and

(e) a nucleotide sequence complementary to any of (a), (b), or (c).

3. A vector comprising the nucleic acid molecule of claim 1 or claim 2.

4. A host cell comprising the vector of Claim 3.

5. The host cell of Claim 4 which is a eukaryotic cell.

6. The host cell of Claim 4 which is a prokaryotic cell.

7. A process of producing an apo-A-1 fragment T-cell activation inhibitor-like polypeptide comprising culturing the host cell of Claim 5 under suitable conditions to express the polypeptide and isolating the polypeptide from the culture.

8. A process of producing an apo-A-1 fragment T-cell activation inhibitor-like polypeptide comprising culturing the host cell of Claim 6 under suitable conditions to express the polypeptide and isolating the polypeptide from the culture.

9. A polypeptide produced by the process of Claim 7.

10. A polypeptide produced by the process of Claim 8.

11. The process of Claim 7, wherein the nucleic acid molecule comprises promoter DNA other than the promoter DNA for native apo A-1 operatively linked to the DNA encoding the AFTI polypeptide.

12. The process of Claim 8, wherein the nucleic acid molecule comprises promoter DNA other than the promoter DNA for native apo A-1 operatively linked to the DNA encoding the AFTI polypeptide.

13. The isolated nucleic acid molecule according to Claim 2 wherein the percent identity is determined using a computer program selected from the group consisting of GAP, BLASTP, BLASTN, FASTA, BLASTA, BLASTX, BestFit, and the Smith-Waterman algorithm.

14. A process for determining whether a compound inhibits AFTI polypeptide activity or production comprising exposing a cell according to claim 4 to the compound, and measuring AFTI polypeptide activity or production in said cell.

15. An isolated polypeptide consisting essentially of an amino acid sequence selected from:

(a) an amino acid sequence as set forth in residues 25 to 194 of SEQ ID NO:2;

- (b) an amino acid sequence as set forth in residues 25 to 144 of SEQ ID NO:2;
- (c) an amino acid sequence as set forth in residues 156 to 267 of SEQ ID NO:2;
- (d) an amino acid sequence as set forth in residues 25 to 113 of SEQ ID NO:2;
- (e) an amino acid sequence as set forth in residues 75 to 113 of SEQ ID NO:2;
- (f) an amino acid sequence for an ortholog of SEQ ID NO:2, wherein the encoded polypeptide has an activity of the polypeptide as set forth in SEQ ID NO:2;
- (g) an amino acid sequence that is at least about 70, 80, 85, 90, 95, 96, 97, 98, or 99 percent identical to the amino acid sequence of at least one of (a), (b), or (c), wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO:2;
- (h) a fragment of the amino acid sequence set forth in at least one of (a), (b), (c), (d), or (e) comprising at least about 25 amino acid residues, wherein the polypeptide has an activity of a polypeptide as set forth in SEQ ID NO:2;
- (i) an amino acid sequence for an allelic variant or splice variant of at least one of (a)-(f) wherein the polypeptide has an activity of a polypeptide as set forth in SEQ ID NO:2.

16. An isolated polypeptide encoded by the nucleic acid molecule of claim 2.

17. The isolated polypeptide according to claim 15 wherein the percent identity is determined using a computer program selected from the group consisting of GAP, BLASTP, BLASTN, FASTA, BLASTA, BLASTX, BestFit, and the Smith-Waterman algorithm.

18. An antibody produced by immunizing an animal with the polypeptide according to claim 15.

19. An antibody or fragment thereof which specifically binds the polypeptide according to claim 15.

20. The antibody according to claim 18 which is a monoclonal antibody.

21. A hybridoma that produces the monoclonal antibody according to claim 20.

22. The antibody of claim 18 which is a humanized antibody.

23. The antibody according to claim 19 which is a fully human antibody or a fragment thereof.

24. The antibody according to claim 19 which is a chimeric antibody or fragment thereof.

25. The antibody according to claim 19 which is a CDR-grafted antibody or fragment thereof.

26. The antibody of claim 19 which is an antiidiotypic antibody or fragment thereof.

27. The antibody of claim 19 which is bound to a detectable label.

28. The antibody of claim 19 which is a phage display antibody or fragment

thereof.

29. A method of detecting or quantifying the amount of AFTI polypeptide in a sample comprising contacting the sample with the antibody or fragment according to claim 18 and measuring the antibody - polypeptide interaction.

30. A selective binding agent or fragment thereof which specifically binds at least one polypeptide according to claim 15.

31. The selective binding agent according to claim 30 which is a variable region fragment.

32. The selective binding agent according to Claim 31, wherein the variable region fragment is a Fab or a Fab' fragment.

33. The selective binding agent according to claim 30 which is bound to a detectable label.

34. The selective binding agent according to claim 30 which antagonizes AFTI polypeptide biological activity.

35. A method for treating, preventing, or ameliorating a disease, condition, or disorder comprising administering to a patient an effective amount of a selective binding agent according to Claim 30.

36. A composition comprising the polypeptide according to claim 15 and a

pharmaceutically acceptable formulation agent.

37. A composition comprising the polypeptide according to claim 16 and a pharmaceutically acceptable formulation agent.

38. The composition according to claim 36, wherein the pharmaceutically acceptable formulation agent comprises at least one of a carrier, adjuvant, solubilizer, stabilizer, or anti-oxidant.

39. The composition according to claim 37, wherein the pharmaceutically acceptable formulation agent comprises at least one of a carrier, adjuvant, solubilizer, stabilizer, or anti-oxidant.

40. The polypeptide according to claim 15, which is covalently modified with a water-soluble polymer.

41. The polypeptide according to claim 40, wherein the water-soluble polymer is selected from polyethylene glycol, monomethoxy-polyethylene glycol, dextran, cellulose, poly-(N-vinyl pyrrolidone) polyethylene glycol, propylene glycol homopolymers, polypropylene oxide/ethylene oxide co-polymers, polyoxyethylated polyols, and polyvinyl alcohol.

42. The polypeptide according to Claim 16, which is covalently modified with a water-soluble polymer.

43. The polypeptide according to claim 42, wherein the water-soluble polymer is selected from at least one of polyethylene glycol, monomethoxy-polyethylene glycol,

dextran, cellulose, poly-(N-vinyl pyrrolidone) polyethylene glycol, propylene glycol homopolymers, polypropylene oxide/ethylene oxide co-polymers, polyoxyethylated polyols, and polyvinyl alcohol.

44. A viral vector comprising the nucleic acid molecule according to claim 1.

45. A viral vector comprising the nucleic acid molecule according to claim 2.

46. A fusion polypeptide comprising the polypeptide according to claim 15 and a heterologous amino acid sequence.

47. The fusion polypeptide according to claim 46, wherein the heterologous amino acid sequence is an IgG constant domain or fragment thereof.

48. A fusion polypeptide comprising the polypeptide according to claim 16 and a heterologous amino acid sequence.

49. The fusion polypeptide according to claim 48, wherein the heterologous amino acid sequence is an IgG constant domain or fragment thereof.

50. A method for reducing inflammation in a subject comprising administering to said subject the polypeptide according to claim 15.

51. A method for reducing inflammation in a subject comprising administering to said subject the polypeptide according to claim 16.

52. A method for reducing IL-1 β secretion in a subject, comprising administering to said subject the polypeptide according to claim 15.

53. A method for reducing IL-1 β secretion in a subject, comprising administering to said subject the polypeptide according to claim 16.

54. A method for reducing TNF- α secretion in a subject, comprising administering to said subject the polypeptide according to claim 15.

55. A method for reducing TNF- α secretion in a subject, comprising administering to said subject the polypeptide according to claim 16.

56. A method for treating an IL-1 mediated disease, comprising administering to said subject the polypeptide according to claim 15.

57. A method for treating an IL-1 mediated disease, comprising administering to said subject the polypeptide according to claim 16.

58. A method for treating a TNF- α mediated disease, comprising administering to said subject the polypeptide according to claim 15.

59. A method for treating, preventing, or ameliorating a medical condition involving monocyte activation, said method comprising administering to a subject a molecule selected from at least one of (a) apo-A-I, (b) an apo-A-1 fragment T cell activation inhibitor (AFTI), and (c) a fusion protein comprising SEQ ID NO: 2.

